

# **Effectiveness of Learner's Intervention Booklet in Improving the Skills in Handicraft**

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# Abstract

The main purpose of the study was to test the effectiveness of the learner's intervention booklet (LIB) in improving the skills in handicrafts of grade 7 students through descriptive-experimental research design. The data were gathered from thirty (30) struggling students as purposively chosen respondents using survey questionnaire and LIB. The results showed that the LIB was effective because there was an increase in the scores of the students in their practice tasks and assessments. Furthermore, there is no significant difference between the first assessment and second assessment scores after the use of the two intervention booklets. This clearly indicates that the utilization of the LIB resulted to a significant improvement in the skills of Grade 7 struggling students. Thus, this study concludes the use of the LIB be sustained. Therefore, TLE teachers advocate for the development of learners' intervention materials not only in handicraft but also in other areas of TLE. The intervention materials can be given on the planned date, and the intervention can be offered immediately after each class. The teacher has to recognize the struggling students so that the remediation is given in a timely and effective manner.

Keywords: learner's intervention booklet, handicraft, technology and livelihood education, TLE

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## 1. Introduction

The Department of Education (DepEd) Order no. 8 series of 2015 known as the Policy Guidelines on Classroom Assessment for the K to 12 Basic Education Program states that adequate and appropriate intervention must be provided to ensure that learners are prepared before summative assessments are administered. It is necessary to provide remedial classes since it gives an opportunity to figure out ways to serve struggling students. However, there is also a need to develop an intervention material intended for remediation classes to enhance the performance of the students as well as to lighten the tasks of the teachers in conducting the remediation.

Remedial education is assigned to assist students in order to achieve expected competencies. In order to achieve it, there should be enough activities to lead the learners to mastery. The activities should be short, simple as well as fun for the learners not to become bored. Similarly, the teacher should give a variety of activities to cater diverse learning styles. They should also assure that the activities were aligned to the Most Essential Learning Competencies (MELC). According to Jimenez (2020), remediation activities are one way to ensure educational help to students who are low achievers and absentees. This assures improved academic achievement for all children who are in danger of dropping out or failing.

In K to 12 Basic Education Program (BEP), Technology and Livelihood Education (TLE) for Grades 7 and 8 is an exploratory subject that focuses on common competencies such as use and maintenance of tools, observing safety in the workplace, mensuration, and calculation, interpreting technical drawings and occupational health and safety. These competencies must be mastered by the students before they take the higher level of competencies in Grades 9 and 10. However, mastery of these skills and competencies becomes a challenge for the students who are neither interested nor fascinated with the activities in the subject. As the subject requires practical application and hands-on activities, students struggle with the performance outputs. Thus, remediation comes to picture.

Handicraft is one of the TLE learning areas that deals with concepts and experiences that provide learners with the opportunity to acquire and reinforce knowledge, skills, attitudes, and values. However, majority of the students are not skilled and not interested on this. The remediation strategy implemented for this particular learning area is the LIB. It targets students

individually who need to develop basic knowledge and abilities in handicraft, and it is designed so that students may appreciate and enjoy using it.

This study aims to find out the effectiveness of the LIB as a remediation material in Grade 7 TLE at one high school in the Philippines for the Third Quarter of the academic year 2021–2022.

## 2. Literature review

#### 2.1. Remediation/Intervention

According to Traci (2013), teachers must employ the most effective intervention tactics in order to serve all students. Intervention is an important element of schools, and differentiated education, which allows students to regulate their learning at any time and in any place. The intervention focuses heavily on teaching specific instructional topics (Jørgensen et al., 2009). However, Dartington (2013) asserts that evidence-based interventions and replication have the potential to improve outcomes. Accordingly, Kim (2019) reminds that failure to replicate can reveal hidden mediators of contextual variations between efficacy and effectiveness trials. For starters, replication failure might expose structural impediments to program adoption. Second, it may identify who and where a program theory of change works best. Third, it implies that a program implementation paradigm based on fidelity first and adaptability second can increase the efficacy of evidence-based treatments and student outcomes.

As it is critical to effective teaching, Foorman and Torgesen (2001) suggest that increasing instructional time helps certain struggling students achieve academic progress; giving small-group teaching is one of the most practicable approaches for strengthening intervention for severely atrisk students. According to Manatiaga (2001), instructions should encourage students to become active learners by providing chances for students to reflect on their motivation and the application of motivational methods in learning. For this, Roberts (2011) opines that instructional design entails more than simply creating instruction. It is a methodical way of analyzing problems, establishing the needs of a group of people, and selecting the best solution for that problem and group of people. Thus, Saclao (2016) suggests that lessons be organized in a logical and progressive order.

The most common intervention in today's teaching and learning is the Strategic Intervention Material (SIM). According to Rodrigo (2019), SIM is designed to remediate learners particularly in the least mastered competencies, engage learners with engaging activities, arouse

learners' attention by making the information visually appealing, and inspire learners to think more, do more, and learn more. For this, learning objectives are necessary clear. For Stiggins (2004), without clear explanations of the desired learning, there will be no effective evaluations. Similarly, Celikoz (2010) observes that objectives should be clearly established in teaching materials since they aid in testing and measuring student performance. In order to attain effective learning objectives, it is critical to provide adequate instructional materials.

Another aspect of intervention is the assessment. According to Trotman (2020) as cited by Aguila (2021), the assessment tool was created to assist educators in gathering essential information in order to better assess what training and performance are necessary and to find the best approaches to go through the instructional design/materials process. Assessments should reflect how well students have learned what teachers want them to learn; while training guarantees that they do (Mellon, 2015). Similarly, the classroom assessment and grading techniques have the capacity to foster learning as well as measure and evaluate it (Black et al., 2004). Moreover, practice testing and distributed practice received high utility assessments because they benefit learners of different ages and abilities and have been shown to boost students' performance across many criterion tasks and even in educational contexts. Practice testing enhances learning and retention (Rawson & Dunlosky et al., 2011). In addition, Kurt (2020) adds tasks and activities allow students to practice skills they have learned in preparation for proving them on an evaluation.

In terms of intervention activities, Kurt (2020) suggests aligning activities and assessments to reduce wasted time by allowing students to focus on skills that are relevant to the learning objectives. For example, Dunlosky (2012) suggests on the use of imagery when reading texts that requires pupils to be familiar with the things and concepts to which the words relate so that they can generate internal representations of them. For this, Langberg et al. (2011) suggests teachers to be knowledgeable in material organization and planning. For this, Kurt (2020) asserts that connections between learning objectives, tasks, and evaluations should be clearly defined. According to Santhanam (2002), the identification of the congruence of teaching, learning, and assessment processes would aid in identifying what can and cannot be accomplished in a certain educational context. Based on the congruence model analysis, more realistic goals and tactics for a unit or course may be devised. Mapping the congruence of their aims, procedures, and content is one method for identifying gaps or misalignment in teaching, learning, assessment, and evaluation.

## 2.2. Theoretical framework

Intervention materials are now widely regarded as effective techniques for improving low student performance in the Philippine educational system. SIM is a teaching tool that is integrated into the teaching techniques to promote student activity and so raise their level of understanding (Dy, 2011). It has been carefully developed and designed to offer remedial material to pupils who have low academic proficiency in the subject. It is provided to students who are unable to understand topic concepts after receiving standard classroom instruction.

This research is based on the SIM idea. School resource inputs (SRI) encompass print and non-print objects meant to convey knowledge to pupils during the educational process. Kits, textbooks, magazines, newspapers, photos, recordings, slides, transparencies, videos, video discs, workbooks, and electronic media such as music, movies, radio, software, CD - ROMs, and online services are additional examples of instructional materials (Dahar, 2011). The importance of instructional material in the teaching and learning process is extremely significant (Nicholls, 2000) that improves students' memory and makes the teaching-learning process more interesting (Raw, 2003). De Borja (2005) points out that instructional material creators must be mindful of students' needs, which should be straightforward and acceptable for both students who are capable of employing standard thinking patterns and those who are not. He also claimed that the contents should correspond to or not beyond the learners' cognition.

## 3. Methodology

## 3.1. Research Design

This study used a descriptive-experimental research design that aims to find out the effectiveness of the LIB as a remediation material in Grade 7 TLE at one high school in the Philippines for the Third Quarter of the academic year 2021–2022.

## 3.2. Respondents of the Study

The respondents of the study were composed of thirty (30) Grade 7 students who were not able to meet the mastery level in TLE particularly in the handicraft topic during the third quarter of academic year 2021–2022. For this purposing sampling technique was the most appropriate.

#### 3.3. Research Instrument

The main instrument used in the study was a researcher-developed LIB material for handicraft. It was evaluated by the respondents in terms of its components and format. The format of the LIB was adopted from the SIM and Mañores (2017). Another data gathering tool was survey questionnaire composed of two parts namely: part I describes the respondent's profile which includes age, gender, parent's occupation, parent's educational attainment, and family income and part II deals with the evaluation of the LIB. Other variables used were adopted from the study of Aguila (2021). The LIB and the questionnaire were presented and checked by members of the panel and five teachers from TLE and English subjects, who are experts in the fields of professional education and TLE.

After the approval, permission to conduct the was secured from the office of the Schools Division Superintendent and the Principal. The researcher gave the LIB and questionnaires to the respondents during the third grade period after accepting the letter of permission. Students were asked to go over the remediation material and accomplish the given tasks. The remediation material was retrieved for tabulation and interpretation of data.

#### 3.4. Statistical Treatment of the Data

Frequency and percentage were used to determine the profile of the respondents. Mean and Standard Deviation were used for the perception of the respondents on the Learner's Intervention Booklet. T-Test was utilized to find out the significant difference between the first assessment and second assessment of the skills in handicraft.

## 4. Findings and Discussion

Table 1 shows the students' evaluation of the LIB components in terms of learning objectives, learning content, practice task and assessments.

In terms of learning objectives, the overall mean was 4.27, with a standard deviation of 0.70. This means that LIB's learning objectives meet the students' expected to understand the lessons. This means students' utilization of the intervention booklet improves their cognitive capacities, and skills in reaching learning objectives. This affirms Stiggins (2004) that teaching

materials should begin with clear explanations of the desired learning to achieve effective evaluations.

#### Table 1

Students' Evaluation of the LIB Components

Indicators	Mean	SD	VI						
Learning Objectives									
are in line with the Most Essential Learning Competencies;	4.23	0.94	Agree						
are measurable in terms of students' performance;	4.3	0.79	Agree						
are attainable within a reasonable amount of time;	4.23	0.86	Agree						
are developmentally appropriate;	4.33	0.61	Agree						
are result-oriented.	4.23	0.86	Agree						
Overall	4.27	0.7	Agree						
Learning Content									
are congruent to the learning objectives;	4.37	0.67	Agree						
meet students' individual learning needs through their levels of readiness,									
learning styles, and interests;	4.3	0.92	Agree						
give step-by-step procedures that are simple to understand;	4.37	0.85	Agree						
provide information in a clear and easy approach;	4.5	0.63	Strongly Agree						
motivate students to take the remediation.	4.27	0.91	Agree						
Overall	4.36	0.69	Agree						
Practice Task									
can improve the critical thinking of the students;	4.33	0.66	Agree						
can engage the students to perform the task;	4.2	0.89	Agree						
are aligned instructions based on learning strengths and needs;	4.43	0.57	Agree						
are informative in order to accomplish the required competence;	4.4	0.62	Agree						
can assist the student to perform the task.	4.43	0.63	Agree						
Overall	4.36	0.54	Agree						
Assessments									
are based on the degree of knowledge of the students;	4.33	0.66	Agree						
use appropriate criteria for each learning task;	4.2	0.92	Agree						
measure skills ranging from basic to complex;	4.27	0.91	Agree						
offer clear instructions on how to answer or do each lesson's evaluation;	4.37	0.72	Agree						
are in line with the content.	4.3	0.88	Agree						
Overall	4.29	0.73	Agree						

Legend: 4.50-5.00 Strongly Agree/ Highly Observed, 3.50-4.49 Agree/ Observed, 2.50-3.49 Moderately Agree/ Moderately Observed, 1.50-2.49 Disagree/ Less Observed, 1.00-1.49 Strongly Disagree/ Not Observed

With the mean of 4.33, objectives were developmentally appropriate. This means that LIB is the practice of developing a curriculum depending on what students are intellectually and physically capable of doing at their age. Additionally, Maranan (2011) as cited by Aguila (2021) pointed out that teaching materials should be centered not only on learner needs but also on how learning objectives should be met. The respondents also agreed with the lowest mean of 4.23 that

LIB is aligned with the Most Essential Learning Competencies, attainable in a reasonably significant period of time, and outcomes. This means that even if students are modular distance learners, they can learn the skills they need to know regardless of their current situation or condition.

In terms of learning contents, all indicators have an overall mean of 4.36 with a standard deviation of 0.69. The result further reveals that students observed that the totality of what is to be taught in the subject area was relevant to the learning competencies. This also means that the students comprehended the lesson better, particularly with detailed directions and step-by-step procedures in the LIB contents. This is the description of Jørgensen et al. (2009) that the intervention focuses heavily on teaching specific instructional topics. Result further confirms with a mean of 4.50, that the learning contents of LIB deliver information in a clear and easy approach. This indicates that the students were able to immediately apply the knowledge after seeing the clear and simple directions. The lowest mean of 4.27 reveals that LIB encourages students to take the remediation. Almost all learners who utilized the Learner's Intervention Booklet passed on time and received high grades. This confirms the assertions of Manatiaga (2001) that instructions should encourage students to become active learners by providing chances for students to reflect on their motivation and the application of motivational methods in learning.

In terms of practice task, the overall mean of 4.36 (agree) shows students observed that a piece of work to be done or undertaken in the lesson is very important before they can proceed to the final assessment. Indeed, it really helps students in order to do the task accurately and appropriately. Similarly, Kurt (2020) suggests that tasks and activities should allow students to practice skills they have learned in preparation for proving them on an evaluation. The highest mean score 4.43 reflects that practice tasks in LIB provide aligned instructions based on the learning strengths and needs of students and can help the student to accomplish the task. Due to the practice tasks' relevance to the information in the LIB and their ability-based nature, students observed that they could be completed successfully. The outcome also shows that when the students began the activities with a practice task, their productivity increased. This is the exact findings of Rawson and Dunlosky (2011) that practice testing enhances learning and retention. However, the lowest mean of 4.20 (agree) shows that LIB can engage the students to perform the tasks. This shows that students will be able to complete the work that has been given to them and will believe they can complete it on their own.

In terms of assessments, the mean score of 4.29 reflects that students observed that the technique or instrument used by teachers to evaluate and measure students' learning progress, skill acquisition, or educational needs is essential in determining whether or not students' skills have improved as a result of LIB guidance. Furthermore, the results indicate that the students performed well on the performance tasks given to them since all the results on the given indicators were positive. Similarly, Chambers et al, (2016) asserts that evaluations of more tailored interventions have also yielded excellent results. Meanwhile, the highest mean score (4.37=agreed) shows that given assessments in LIB provide clear instructions on how to answer or do each lesson's evaluation. Students noticed that it became easier for them to complete the work correctly as a result of this. The outcome also implies that when students understand what they are going to perform, the quality of their output improves. However, the lowest mean (4.20=agree) indicates that LIB used appropriate criteria for each learning task given. This is the exact explanation of Black et al. (2004) that classroom assessment and grading techniques have the capacity to foster learning as well as measure and evaluate it. Indeed, it is essential that the student understands the criteria for the work at hand since it provides a reference for how or what the evaluator should see in their output.

Table 2 shows students' evaluation of the LIB format in terms of presentation, organization, replicability and congruency.

In terms of presentation, the overall mean (4.41=agree) indicates that LIB is well-organized and well-presented. In fact, presentation is a big factor for students so that they are more enticed to answer and do the task given to them. The findings of Dunlosky (2012) that the use of imagery when reading texts to make pupils familiar with the things and concepts is applied in the results. The LIB has more detailed discussion that includes pictures of each procedure for students to easily understand the context. The highest mean score (4.43=agreed) shows that LIB employs graphics and photographs that are localized/original. This shows appropriate font size, proper spacing, wellwritten lessons, and high-quality printouts attracted the students. Moreover, it can be seen that all the pictures or images posted in the LIB are pictures of the actual tools, materials, and procedures used when doing the activities. This makes it easier for the students to identify what to use and what to do. On the other hand, the lowest mean of 4.40 (agree) indicates LIB as appealing and pleasing to the eye, appropriate for the student's age, simple, engaging, and interesting, and conveyed content on the cover page of the intervention booklet. This implies that once students see the images, they already know what the procedures are. This is the actual description of Roberts (2011) that instructional design entails more than simply creating instruction.

#### Table 2

Students' Evaluation of LIB Format

Indicators	Mean	SD	Interpretation						
Presentation									
are appealing and pleasing to the eye;	4.4	0.67	Agree						
employs graphics and photographs that are localized/original;	4.43	0.63	Agree						
are appropriate for the student's age;	4.4	0.67	Agree						
are simple, engaging, and interesting;	4.4	0.62	Agree						
conveys content on the cover page of the intervention booklet.	4.4	0.67	Agree						
Overall	4.41	0.58	Agree						
Organization									
in line with the Most Essential Learning Competencies;	4.4	0.86	Agree						
stimulating students learning;	4.47	0.63	Agree						
well-formatted;	4.4	0.67	Agree						
appropriate in the needs of learners;	4.5	0.63	Strongly Agree						
showing clear illustrations in relation to text.	4.37	0.72	Agree						
Overall	4.43	0.57	Agree						
Replicability									
resembles the original learning booklet;	4.43	0.68	Agree						
are appropriate to the needs of learners;	4.47	0.63	Agree						
shows the appropriateness of the size of the letter as an intervention booklet;	4.47	0.57	Agree						
conveys content on the cover page of the intervention booklet;	4.5	0.57	Strongly Agree						
are simple and do not contain images that could distract the layout.	4.43	0.68	Agree						
Overall	4.46	0.57	Agree						
Congruency									
in line with the Most Essential Learning Competencies;	4.43	0.68	Agree						
appropriate in the needs of learners;	4.53	0.57	Strongly Agree						
designed to support the objectives of the learning area;	4.57	0.57	Strongly Agree						
designed to assess important learning outcomes represented by the									
objectives;	4.53	0.57	Strongly Agree						
mapping the congruence of teaching, learning, and assessment for their									
purposes, processes, and content.	4.57	0.57	Strongly Agree						
Overall	4.53	0.56	Strongly Agree						

Legend: 4.50-5.00 Strongly Agree/ Highly Observed, 3.50-4.49 Agree/ Observed, 2.50-3.49 Moderately Agree/ Moderately Observed, 1.50-2.49 Disagree/ Less Observed, 1.00-1.49 Strongly Disagree/ Not Observed

In terms of organization, the overall mean of 4.43 (agree) indicates LIB as a well-formatted intervention booklet. When the material used by the students is well-arranged and the preparations of each activity are well-structured, it is easier for the students to follow. This asserts Kurt (2020) that aligning activities and assessments reduces wasted time by allowing students to focus on skills that are relevant to the learning objectives. The highest mean (4.50=strongly agree) shows that

LIB is appropriate for the needs of learners which means to be with excellent format. The entire content of the LIB was actually filtered so that only the lessons and activities that the students did not do or where they had difficulty with the topic were listed based on the chronological order of the information to be learned. This is the exact suggestion of Saclao (2016) that lessons be organized in a logical and progressive order. On the other hand, the lowest mean (4.37=agree) signifies that LIB was showing clear illustrations in relation to text. This indicates that the LIB has been systematized to the point that the relationships between the images and the text are being observed.

In terms of replicability, the overall mean (4.46=agree) indicates that the LIB can be copied or reproduced like the other intervention material. It shows that students considered the design and structure of the intervention material appealing and engaging; and that the contents were essential and did not distract them, which resulted in an increase in their activity scores. This is similar to Dartington (2013) that evidence-based interventions and replication have the potential to improve outcomes. The highest mean (4.50=strongly agree) shows that LIB conveys content on the cover page of the intervention booklet with excellent format as to replicability. It emphasizes what student respondents observed that by simply looking at the cover page of the intervention booklet, it appears to tell what information is contained within the booklet. On the other hand, the lowest mean (4.43=agree) indicates that LIB is straightforward and does not include pictures that might distract the user. This shows that respondents understood the whole presentation of the LIB, particularly the illustrations.

In terms of congruency, the overall mean (4.53=strongly agree) indicates that learning activities from the LIB are designed to support the objectives of the learning area and that the evaluation methods are designed to assess important learning outcomes represented by the objectives. Santhanam (2002) asserts the identification of the congruence of teaching, learning, and assessment processes would aid in identifying what can and cannot be accomplished in a certain educational context. The highest mean (4.57=strongly agreed) shows that LIB is designed to support the objectives of the learning area and map the congruence of teaching, learning, and assessment for their purposes, processes, and content. It emphasizes that there is a consistent and harmonious relationship between the objectives and the given activities in LIB. This is confirmed by Kurt (2020) that the connections between learning objectives, tasks, and evaluations should be clearly defined. On the other hand, the lowest mean (4.43=agree) indicates that LIB is in line with

the MELCs given by the DepEd for the area of handicraft. This shows that student respondents understood lessons and tasks given based on what was stated in the MELCs.

#### Table 3

Scores Performance of the Student Respondents after using the First Learner's Intervention Booklet

Score		Practice task			Assessment				Interpretation	
	PT1	PT2	PT3	PT4	A1	A2	A3	A4	inter pretation	
5	24	25	26	25	21	22	20	17	Advanced	
4	6	4	4	5	7	5	7	9	Proficient	
3	-	1	-	-	1	2	2	3	Approaching Proficiency	
2	-	-	-	-	-	-	-	-	Developing	
1	-	-	-	-	1	1	1	1	Beginning	
Total	30	30	30	30	30	30	30	30		

Legend: PT1- Creativity, PT2- Originality, PT3- Workmanship, PT4- Accuracy, A1- Creativity, A2- Originality, A3- Workmanship, A4- Accuracy

Table 3 presents the students' performance scores in practice task and assessment activities after utilizing the first intervention booklet. The majority of the respondents performed "advanced" or received five points for both activities in the following criteria: creativity, originality, workmanship, and accuracy. Furthermore, some of the students performed proficiently or received four points, and a few of them received three points or approaching proficiency, and one point or beginning. The majority of the students performed excellently in their performance tasks when they used the LIB where detailed procedures can be found with illustrations on doing the activities. For the students in the developing or beginning stages, the teacher can cater again to further enhance the students' skills in the part where they are having difficulties while the advanced performers can still further enhance their skills in handicraft by using other techniques in doing the tasks. This is similar to Jimenez (2020) that remediation activities are one way to ensure educational help to students who are low achievers and absentees. As such, this assures improved academic achievement for all children who are in danger of dropping out or failing.

Score		Practice task			Assessment				Internation	
	PT1	PT2	PT3	PT4	A1	A2	A3	A4	inter pretation	
5	25	26	24	23	25	22	20	22	Advanced	
4	4	3	4	5	5	7	9	7	Proficient	
3	-	-	1	1	-	1	1	1	Approaching Proficiency	
2	-	-	-	-	-	-	-	-	Developing	
1	1	1	1	1	-	-	-	-	Beginning	
Total	30	30	30	30	30	30	30	30		

#### Table 4

Scores Performance of the Student Respondents after using the Second Learner's Intervention Booklet

Legend: PT1- Creativity, PT2- Originality, PT3- Workmanship, PT4- Accuracy, A1- Creativity, A2- Originality, A3- Workmanship, A4- Accuracy

Table 4 presents the students' performance scores in practice task and assessment activities after utilizing the second intervention booklet. The majority of the respondents performed "advanced" or received five points for both activities in the following criteria: creativity, originality, workmanship, and accuracy. Furthermore, some of the students performed proficiently or received four points, and a few of them received three points, interpreted as approaching proficiency, and one point, interpreted as beginning. The majority of the students performed excellently in their performance tasks when they used the LIB compared to the usual module. As Okobia (2011) notes, teaching materials refer to everything that might help the instructor promote teaching and learning. When children are given the opportunity to study through more than one sense, they learn quicker and more easily.

#### Table 5

Significant Difference between the First and Second Assessment of the Skills in Handicraft

		First Assessment		Second As			Sig.	
		Μ	SD	Μ	SD	t	df	(2-tailed)
	Creativity	4.80	0.41	4.70	0.95	.551	29	.586
	Originality	4.80	0.48	4.73	0.94	.441	29	.662
Practice Task	Workmanship	4.87	0.35	4.63	1.00	1.229	29	.229
	Accuracy	4.83	0.38	4.60	1.00	1.270	29	.214
	Total	19.30	1.24	18.67	3.79	.947	29	.351
Assessment	Creativity	4.53	1.01	4.83	0.38	-1.725	29	.095
	Originality	4.53	1.04	4.70	0.53	961	29	.344
	Workmanship	4.47	1.04	4.63	0.56	-1.095	29	.283
	Accuracy	4.33	1.06	4.70	0.53	-2.626	29	.014
	Total	17.87	3.96	18.87	1.63	-1.782	29	.085
	Grand Total	37.17	4.23	37.53	4.78	404	29	.689

Table 5 indicates that the majority of students performed exceptionally well after utilizing the first and second LIB to practice task and assessment. The result further shows that there is a grand total mean of 37.17 and a standard deviation of 4.23 for the first assessment and a grant total mean of 37.53 and a standard deviation of 4.78 for the second assessment. Moreover, it is clear from the result of the t-value, degrees of freedom, and sig. (2-tailed) that in this observation the students performed admirably in the given handicraft activities, which measure their skills in creativity, originality, workmanship, and accuracy.

The result also shows that there is no significant difference between the first assessment and second assessments. After utilizing the two intervention materials, both results showed that the performance of the students was advanced compared to their performance in normal classes utilizing the module that was given to them. The LIB enables students to clearly see very detailed procedures with illustrations to do the activities. Mañores (2016) believes that there is a need to design intervention materials for remediation classes in order to improve students' performance and alleviate the burden on instructors when performing remediation.

## **5.** Conclusion

This study aims to find out the effectiveness of the LIB as a remediation material in Grade 7 TLE at one high school in the Philippines for the Third Quarter of the academic year 2021–2022. Through descriptive-experimental research design, the data were gathered from thirty (30) struggling students as purposively chosen respondents using survey questionnaire and LIB.

The results showed that the LIB was effective because there was an increase in the scores of the students in their practice tasks and assessments. Furthermore, there is no significant difference between the first assessment and second assessment scores after the use of the two intervention booklets. This clearly indicates that the utilization of the LIB resulted to a significant improvement in the skills of Grade 7 struggling students. Thus, this study concludes the use of the LIB be sustained.

This study recommends TLE teachers advocate for the development of learners' intervention materials not only in handicraft but also in other areas of TLE. The intervention

materials can be given on the planned date, and the intervention can be offered immediately after each class. The teacher has to recognize the struggling students so that the remediation is given in a timely and effective manner.

## References

- Althoff, S. E., Linde, K. J., Mason, J. D., Nagel, N. M., & O'Reilly, K. A. (2007). Learning Objectives: Posting & Communicating Daily Learning Objectives to Increase Student Achievement and Motivation. Online Submission. https://files.eric.ed.gov/fulltext/ED496125.pdf
- Asio, J. M. R., & Jimenez, E. C. (2020). Effect of Remediation Activities on Grade 5 Pupils' Academic Performance in Technology and Livelihood Education (TLE). *Pedagogical Research*, 5(4), em0075. https://doi.org/10.29333/pr/8464
- Bleses, D., Jensen, P., Højen, A., Slot, P., & Justice, L. (2021). Implementing toddler interventions at scale: The case of "We learn together". *Early Childhood Research Quarterly*, 57, 12-26. https://doi.org/10.1016/j.ecresq.2021.04.008
- Calhoun, C., Sahay, S., & Wilson, M. (2021). Instructional Design Evaluation. *Design for Learning*. https://edtechbooks.org/id/instructional\_design\_evaluation
- Curry, J. H., Johnson, S., & Peacock, R. (2021). Robert Gagné and the systematic design of instruction. *Design for Learning*. https://edtechbooks.org/id/robert\_gagn\_and\_systematic\_design
- Dahar, M. A., & Faize, F. A. (2011). Effect of the availability and the use of instructional material on academic performance of students in Punjab (Pakistan). *Middle Eastern Finance and Economics*, 11, 15-26.
- De Borja, Sharmane L (2005). "Effects of E-Learning on Academic Performance of Junior" Unpublished Master Thesis in Batangas State University.
- Dumigsi, M. P., & Cabrella, J. B. B. (2019). Effectiveness of strategic intervention material in Mathematics as remediation for grade 9 students in solving problems involving quadratic functions. Asian Journal of Education and Social Studies, 5(1), 1-10. DOI: 10.9734/ajess/2019/v5i130137

- Dunlosky, J., Rawson, K. A., Marsh, E. J., Nathan, M. J., & Willingham, D. T. (2013). Improving students' learning with effective learning techniques: Promising directions from cognitive and educational psychology. *Psychological Science in the Public Interest*, 14(1), 4–58. https://doi.org/10.1177/1529100612453266
- Espinosa, A. A. (2014). Strategic intervention material-based instruction, learning approach and students' performance in chemistry. *International Journal of Learning, Teaching and Educational Research*, 2(1). http://ijlter.org/index.php/ijlter/article/view/10
- Gentry, R., Sallie, A. P., & Sanders, C. A. (2013). Differentiated Instructional Strategies to Accommodate Students with Varying Needs and Learning Styles. https://files.eric.ed.gov/fulltext/ED545458.pdf
- Kim, J. S. (2019). Making every study count: Learning from replication failure to improve intervention research. Educational Researcher, 48(9), 599-607. https://doi.org/10.3102%2F0013189X19891428
- Kurt, S. (2020). *How Can We Align Learning Objectives, Instructional Strategies, and Assessments*? https://educationaltechnology.net/how-can-we-align-learning-objectivesinstructional-strategies-and-assessments/
- Langberg, J. M., Epstein, J. N., Girio-Herrera, E., Becker, S. P., Vaughn, A. J., & Altaye, M. (2011). Materials organization, planning, and homework completion in middle-school students with ADHD: Impact on academic performance. *School Mental Health*, 3(2), 93 101. https://doi.org/10.1007/s12310-011-9052-y
- McTighe, J., & O'Connor, K. (2005). Seven practices for effective learning. Assessment, 63(3).
- Mart, C. T. (2011). *How to Sustain Students' Motivation in a Learning Environment*. Online submission. https://files.eric.ed.gov/fulltext/ED519165.pdf
- Saclao, J. (2015). Development and Impact of SIM-MOD (Strategic Intervention Material and Module Combined) on Students' Academic Achievement in Mathematics at the 8<sup>th</sup> Grade Level. *Journal of Science and Mathematics*, 6 (90), 190-212.
- Santhanam, E. (2002). Congruence of teaching, learning, assessment and evaluation. In A. Bunker,
  & G. Swann (Eds.), *Focusing on the Student* (Perth, Australia ed., Vol. 1, pp. 159-166). Edith Cowan University.

- Smith, W. (2015, April). Using Comparative Tests For School Accountability: If We Don't Tell Students What They Should Know At The Beginning Of The Year How Do We Test To See What They Should Have Learned At The End Of The Year? Allied Academies International Conference Proceedings Vol. 20, No. 1, P. 21.
- Social Research Unit at Dartington (2013) Realising Ambition. Lessons on replication and evidence-based interventions one year. https://youngfoundation.org/wpcontent/uploads/2013/07/Realising-Ambition.pdf
- Vaughn, S., Wanzek, J., Murray, C. S., Roberts, G. (2012). Intensive interventions for students struggling in reading and mathematics: A practice guide. Portsmouth, NH: RMC Research Corporation, Center on Instruction. https://files.eric.ed.gov/fulltext/ED531907.pdf
- Williams, K., & Williams, C. (2011). Five key ingredients for improving motivation. *Research in Higher Education Journal*, 11.